

INFORMATION DISCLOSURE CITATION				Docket Number (Optional) RAY-144J		Application Number 10/698,500	
				Applicant(s) Richard M. Lloyd			
				Filing Date October 31, 2003		Group Art Unit 3641	

U.S. PATENT DOCUMENTS							
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
R		1,198,035	09/12/1916	Huntington	—	—	
R		1,229,421	06/12/1917	Downs	—	—	
R		1,235,076	07/31/1917	Stanton	—	—	
R		1,305,967	06/03/1919	Hawks	—	—	
R		2,296,980	09/29/1942	Carmichael	—	—	

U.S. PATENT APPLICATION PUBLICATIONS							
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
R		2004/0011238	01/22/2004	Ronn et al.	—	—	
R		2003/0019386	01/30/2003	Lloyd et al.	—	—	

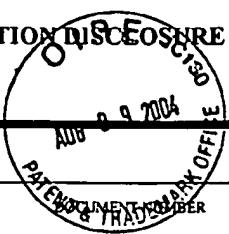
FOREIGN PATENT DOCUMENTS								
	REF	DOCUMENT NUMBER	DATE	COUNTRY			Translation	
							YES	NO
R		DE 3327043 A1	02/07/1985	Germany	—	—	#	✓

OTHER DOCUMENTS <small>(Including Author, Title, Date, Pertinent Pages, Etc.)</small>							

EXAMINER <i>Shane L. Lee</i>	DATE CONSIDERED 12/15/2004
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U.S. PATENT DOCUMENTS							
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
E		2,308,683	01/19/1943	Forbes	—	—	
E		2,322,624	06/22/1943	Forbes	—	—	
E		2,925,965	12/23/1960	Pierce	—	—	
E		3,332,348	07/25/1967	Myers et al.	—	—	
E		3,665,009	05/23/1972	Dickinson, Jr.	—	—	

U.S. PATENT APPLICATION PUBLICATIONS							
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							YES	NO

OTHER DOCUMENTS <small>(Including Author, Title, Date, Pertinent Pages, Etc.)</small>							

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U.S. PATENT DOCUMENTS								
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
		3,796,159	03/12/1974	Conger	—	—		
		3,818,833	06/25/1974	Throner, Jr.	—	—		
		4,172,407	10/30/1979	Wentink	—	—		
		4,289,073	09/15/1981	Romer et al.	—	—		
		4,455,943	06/26/1984	Pinson	—	—		
U.S. PATENT APPLICATION PUBLICATIONS								
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U.S. PATENT DOCUMENTS							
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>h</i>		4,516,501	05/14/1985	Held et al.	—	—	
<i>h</i>		4,538,519	09/03/1985	Witt et al.	—	—	
<i>h</i>		4,676,167	06/30/1987	Huber, Jr. et al.	—	—	
<i>h</i>		4,777,882	10/18/1988	Dieval	—	—	
<i>h</i>		5,182,418	01/26/1993	Talley	—	—	

U.S. PATENT APPLICATION PUBLICATIONS							
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FOREIGN PATENT DOCUMENTS								
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							YES	NO


OTHER DOCUMENTS <small>(Including Author, Title, Date, Pertinent Pages, Etc.)</small>							

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U.S. PATENT DOCUMENTS								
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
		5,313,890	05/24/1994	Cuadros	—	—		
		5,524,524	06/11/1996	Richards et al.	—	—		
		5,535,679	07/16/1996	Craddock	—	—		
		5,577,431	11/26/1996	Küsters	—	—		
		5,583,311	12/10/1996	Rieger	—	—		
U.S. PATENT APPLICATION PUBLICATIONS								
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
FOREIGN PATENT DOCUMENTS								
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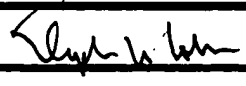
INFORMATION DISCLOSURE CITATION				Docket Number (Optional) RAY-144J		Application Number 10/698,500	
				Applicant(s) Richard M. Lloyd			
				Filing Date October 31, 2003		Group Art Unit 3661 3641	

U.S. PATENT DOCUMENTS							
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		6,666,145	12/23/2003	Nardone et al.	—	—	

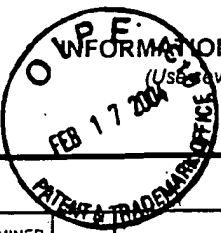
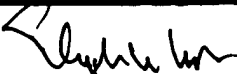
U.S. PATENT APPLICATION PUBLICATIONS							
*EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

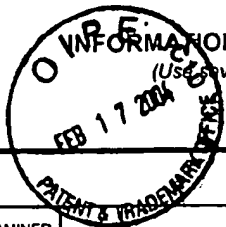
FOREIGN PATENT DOCUMENTS								
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							YES	NO

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 <p style="margin: 0;">OFFICE OF INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)</p>				ATTY DOCKET NO. RAY-144J		SERIAL NO. 10/698,500	
				Applicant(s) Richard M. Lloyd			
				FILING Date October 31, 2003		GROUP 3600	
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
R	1,244,046	10/23/1917	Ffrench	—	—		
T	1,300,333	04/15/1919	Berry	—	—		
L	2,988,994	06/20/1961	Fleischer Jr. et al.	—	—		
R	3,565,009	02/23/1971	Allred et al.	—	—		
R	3,656,433	04/18/1972	Thraillkill et al.	—	—		
R	3,757,694	09/11/1973	Talley et al.	—	—		
L	3,771,455	11/13/1973	Haas	—	—		
L	3,797,359	03/19/1974	Mawhinney et al.	—	—		
T	3,877,376	04/15/1975	Kupelian	—	—		
L	3,941,059	03/02/1976	Cobb	—	—		
R	3,949,674	04/13/1976	Talley	—	—		
FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
T	GB 550,001	12/17/1942	Great Britain	—	—	N/A	
R	EU 270 401 A1	06/08/1988	Europe	—	—		✓
L	WO 97/27447	07/31/1997	WIPO International	—	—	N/A	
R	FR 2 678 723	01/08/1993	France	—	—		✓
R	DE 38 30 527 A1	03/22/1990	Germany	—	—		✓
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
T	Richard M. Lloyd, "Physics of Direct Hit and Near Miss Warhead Technology", Vol. 194, Progress in Astronautics and Aeronautics, Copyright 2001 by the American Institute of Aeronautics and Astronautics, Inc., Chapter 3, pp. 99-197.						
R	Richard M. Lloyd, "Physics of Direct Hit and Near Miss Warhead Technology", Vol. 194, Progress in Astronautics and Aeronautics, Copyright 2001 by the American Institute of Aeronautics and Astronautics, Inc., Chapter 6, pp. 311-406.						
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FILING Date	October 31, 2003	GROUP 3600

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
W	3,954,060	05/04/1976	Haag et al.	—	—	
S	3,977,330	08/31/1976	Held	—	—	
W	4,026,213	05/31/1977	Kempton	—	—	
W	4,036,140	07/19/1977	Korr et al.	—	—	
S	4,089,267	05/16/1978	Mescall et al.	—	—	
W	4,106,410	08/15/1978	Borcher et al.	—	—	
W	4,210,082	07/01/1980	Brothers	—	—	
W	4,211,169	07/08/1980	Brothers	—	—	
W	4,376,901	03/15/1983	Pettibone et al.	—	—	
W	4,430,941	02/14/1984	Raech, Jr. et al.	—	—	
W	4,638,737	01/27/1987	McIngvale	—	—	

FOREIGN PATENT DOCUMENTS

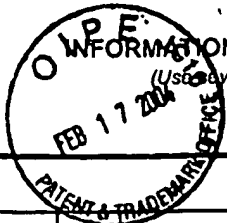
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

W		Richard M. Lloyd, "Conventional Warhead Systems Physics and Engineering Design", Vol. 179, Progress in Astronautics and Aeronautics, Copyright 1998 by the American Institute of Aeronautics and Astronautics, Inc., Chapter 5, pp. 193-251.
W		Richard M. Lloyd, "Aligned Rod Lethality Enhanced Concept for Kill Vehicles", 10th AIAA/BMDD Technology Conf., July 23-26, Williamsburg, Virginia, 2001, pp. 1-12.

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(Use several sheets if necessary)

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RAY-144J

SERIAL NO.

10/698,500

Applicant(s) Richard M. Lloyd

FILING

Date October 31, 2003

GROUP

3600

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
5	4,655,139	04/07/1987	Wilhelm	—	—	
5	4,658,727	04/21/1987	Wilhelm et al.	—	—	
5	4,745,864	05/24/1988	Craddock	—	—	
5	4,770,101	09/13/1988	Robertson et al.	—	—	
5	4,848,239	07/18/1989	Wilhelm	—	—	
5	4,922,826	05/08/1990	Busch et al.	—	—	
5	4,996,923	03/05/1991	Theising	—	—	
5	5,229,542	07/20/1993	Bryan et al.	—	—	
5	5,370,053	12/06/1994	Williams et al.	—	—	
5	5,542,354	08/06/1996	Sigler	—	—	
5	5,544,589	08/13/1996	Held	—	—	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

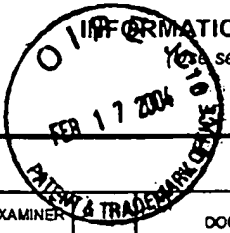
EXAMINER

Ralph W. Welch

DATE CONSIDERED

12/15/2004

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<div style="text-align: center;">  <p>INFORMATION DISCLOSURE CITATION (See several sheets if necessary)</p> </div>				ATTY DOCKET NO. RAY-144J		SERIAL NO. 10/698,500	
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U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
<i>h</i>	5,578,783	11/26/1996	Brandeis	—	—		
<i>h</i>	5,670,735	09/23/1997	Ortmann et al.	—	—		
<i>h</i>	5,691,502	11/25/1997	Craddock et al.	—	—		
<i>h</i>	5,796,031	08/18/1998	Sigler	—	—		
<i>h</i>	5,823,469	10/20/1998	Archangelsky et al.	—	—		
<i>h</i>	6,044,765	04/04/2000	Regebro	—	—		
<i>h</i>	6,186,070	02/13/2001	Fong et al.	—	—		
<i>h</i>	6,598,534	07/29/2003	Lloyd et al.	—	—		
<i>h</i>	6,622,632	09/23/2003	Spivak	—	—		
<i>h</i>	H1047	05/05/1992	Henderson et al.	—	—		
<i>h</i>	H1048	05/05/1992	Wilson et al.	—	—		
FOREIGN PATENT DOCUMENTS							
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<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 2px solid black; border-radius: 50%; padding: 10px; text-align: center; margin-right: 10px;"> INFORMATION DISCLOSURE CITATION <small>(Use several sheets if necessary)</small> FEB 17 2004 PATENT & TRADEMARK OFFICE </div> <div> INFORMATION DISCLOSURE CITATION <small>(Use several sheets if necessary)</small> </div> </div>				ATTY DOCKET NO. RAY-144J		SERIAL NO. 10/698,500	
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m	10/162,498		Lloyd			06/04/2002	
m	10/301,302		Lloyd			11/21/2002	
m	10/301,420		Lloyd			11/21/2002	
m	10/384,804		Lloyd			03/10/2003	
m	10/385,319		Lloyd			03/10/2003	
m	10/456,391		Lloyd et al.			06/05/2003	
m	10/456,777		Lloyd			06/06/2003	
m	10/685,242		Lloyd			10/14/2003	
m	10/370,892		Lloyd			02/20/2003	
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